

# GLOBAL CLIMATE HIGHLIGHTS

## MAJOR CLIMATIC EVENTS AND ANOMALIES AS OF DECEMBER 26, 1992

### 1. Western United States:

#### VERY COLD CONDITIONS CONTINUE.

Temperatures averaged as much as 6°C below normal in northern Nevada and southern Oregon (front cover) while departures dipped to -10°C in the mountain valleys of northern New Mexico and southern Colorado. Readings dropped as lows as -38°C in the northern Great Plains, and reached -8°C in parts of the southern California desert [5 weeks].

### 2. Central United States:

#### WETNESS DIMINISHES.

Little or no precipitation fell as cold, dry air overspread the region [Ending at 8 weeks].

### 3. Northern Argentina:

#### MORE WET WEATHER.

Up to 150 mm of rain drenched much of northeastern Argentina, where six-weeks moisture surpluses approached 200 mm. Farther south and west, precipitation totals were generally below 20 mm, although a few locations topped 40 mm in central Argentina [7 weeks].

### 4. Central and Northern Europe:

#### DRIER CONDITIONS PREVAIL

Relatively light amounts of precipitation (under 20 mm) were measured across much of the region, but parts of Germany and Poland received as much as 30 mm [Ending at 13 weeks].

### 5. Southwestern Europe and Northwestern Africa:

#### SHOWERS BRING LIMITED RELIEF.

Moderate rains soaked east-central Spain while the southern third of Portugal received 100 to 250 mm of rain. Most areas, however, measured less than 10 mm. Precipitation deficits since mid-November reached 110 mm in Morocco and 220 mm in Spain [8 weeks].

### 6. Eastern Mediterranean:

#### ANOTHER COLD SPELL.

Temperatures averaged as much as 7°C below normal as another cold air mass penetrated the region (page 2). According to press reports, heavy snowfalls across eastern and southeastern Turkey isolated thousands of individuals in villages and small towns [6 weeks].

### 7. Iran:

#### HEAVY RAINS CAUSE FLOODING.

As much as 70 mm of precipitation soaked southern and central Iran, generating scattered floods that uprooted trees, inundated farms, and washed out roads, according to press reports [Episodic Event].

### 8. Northeastern Australia:

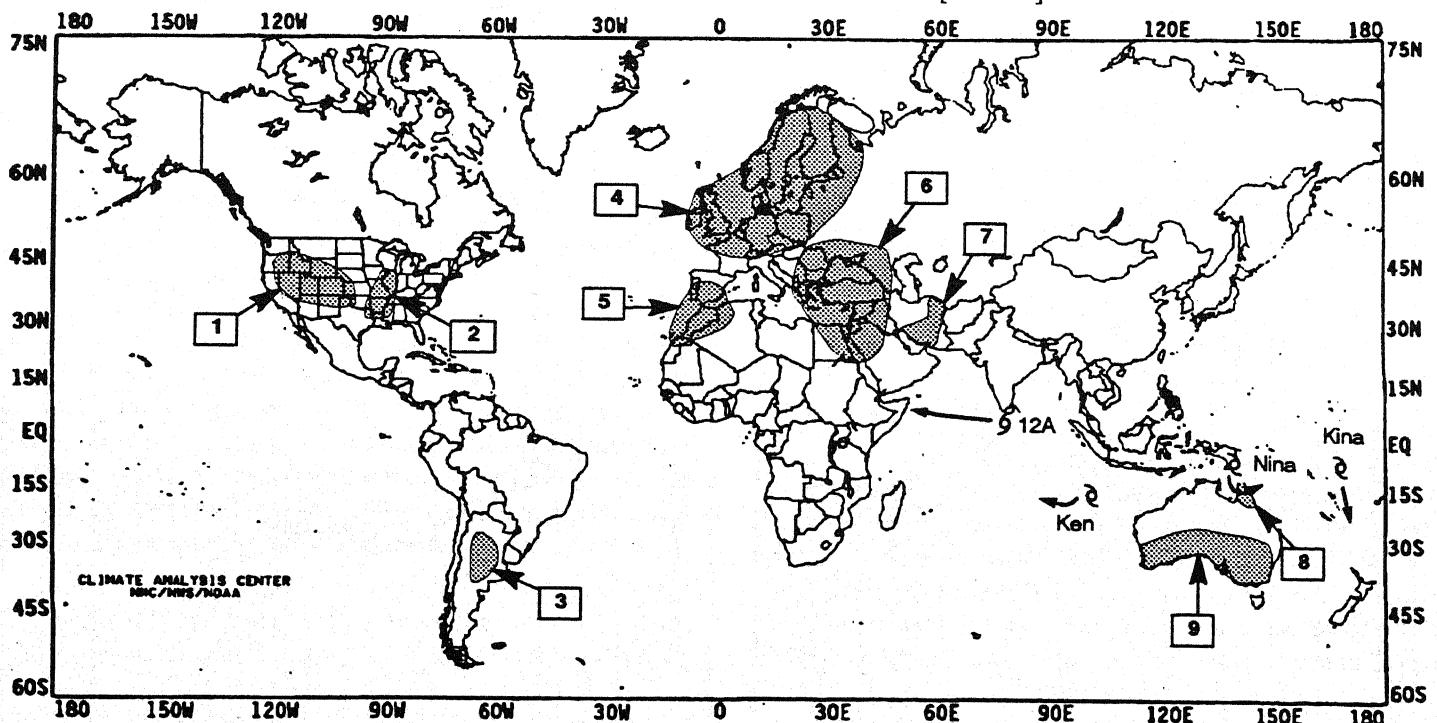
#### TROPICAL STORM BATTERS AREA.

Tropical Storm Nina spread gusty winds and inundating rainfall across the Cape York Peninsula. Between 250 and 400 mm of rain soaked northern and central parts of the peninsula, where daily totals approached 150 mm [Episodic Event].

### 9. Southern Australia:

#### COOL AND WET WEATHER PERSISTS.

Heavy rains dumped up to 150 mm of rain on parts of New South Wales and Victoria [4 weeks]. Farther west, temperature departures reached -3°C in southern sections of Western Australia and South Australia [8 weeks].



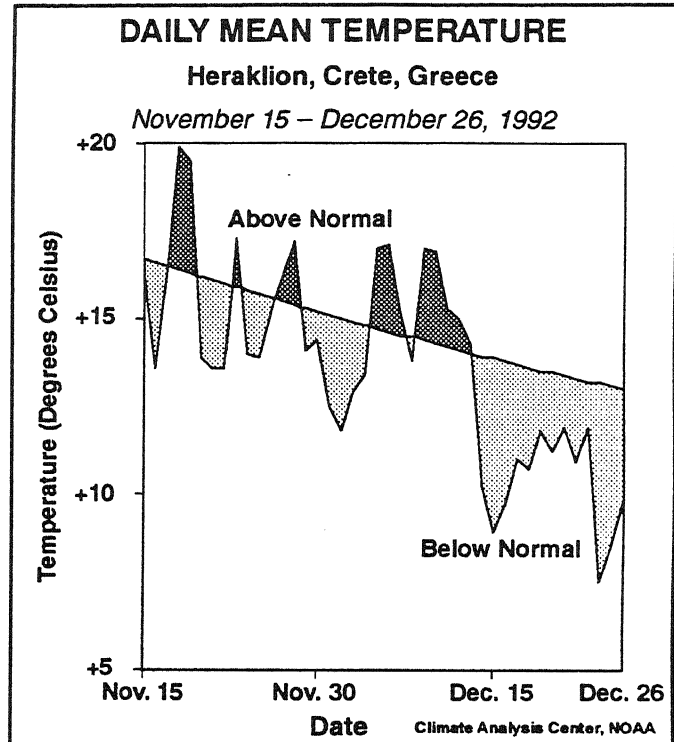
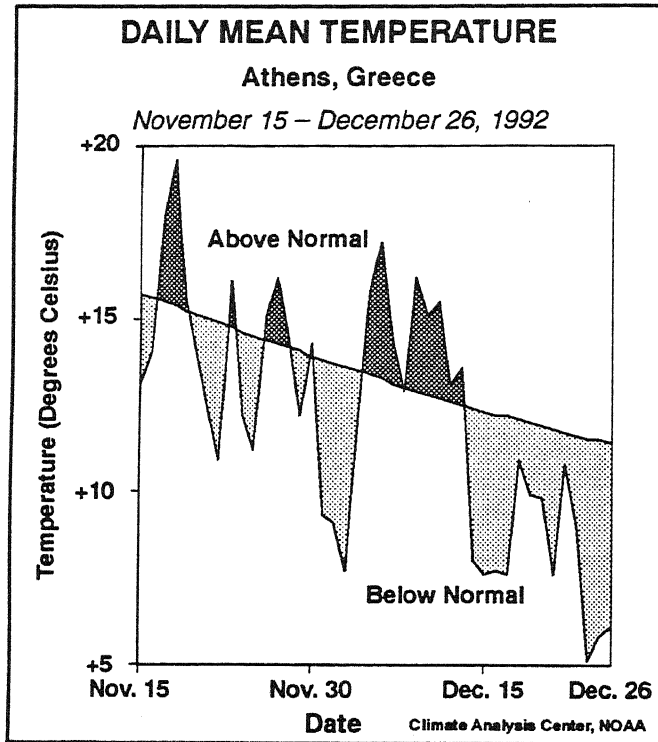
#### EXPLANATION

TEXT: Approximate duration of anomalies is in brackets. Precipitation amounts and temperature departures are this week's values.

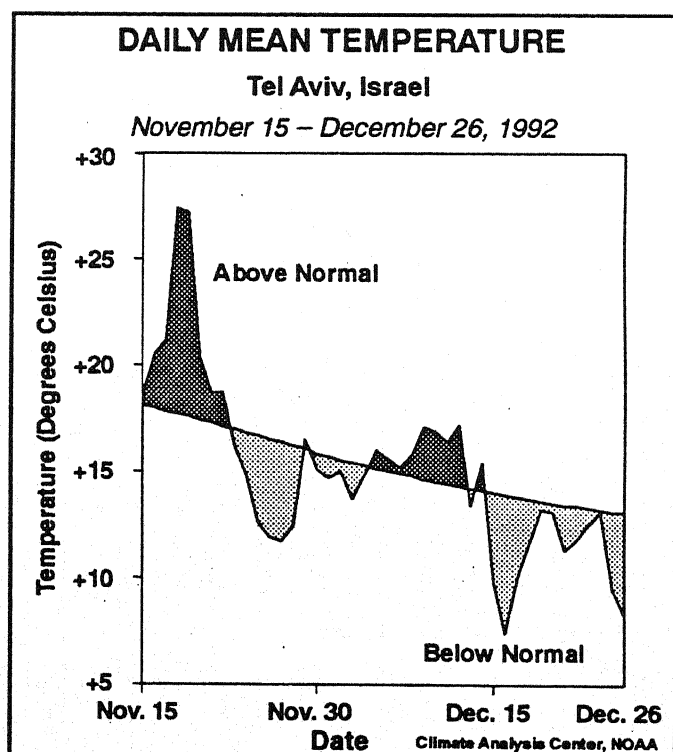
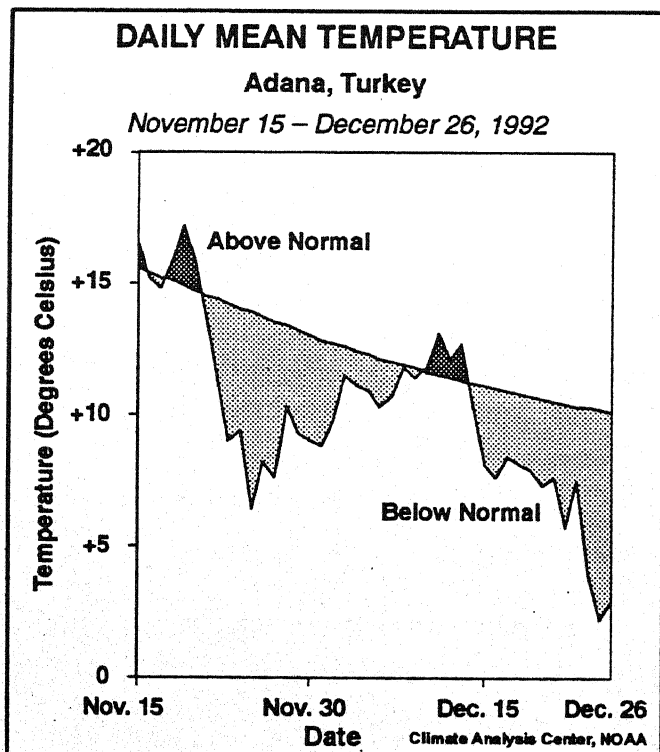
MAP: Approximate locations of major anomalies and episodic events are shown. See other maps in this Bulletin for current two week temperature anomalies, four week precipitation anomalies, long-term anomalies, and other details.

# GLOBAL CLIMATE HIGHLIGHTS FEATURE

## COLD SPELLS IN THE EASTERN MEDITERRANEAN



*The eastern Mediterranean endured two major outbreaks of cold air during the last six weeks. The first came in late November after a brief period of warm weather. A second, more severe cold spell arrived in mid-December and has persisted for the last two weeks. Conditions have been most extreme further east, with the largest negative departures observed in Turkey. Snow and freezing weather has spread as far south as Lebanon, Israel, and Jordan.*



# UNITED STATES WEEKLY CLIMATE HIGHLIGHTS

## FOR THE WEEK OF DECEMBER 20 – 26, 1992

The last full week of December featured the beginning of astronomical Winter and a blast of bitterly cold Arctic air that produced some of the lowest temperatures so far this season in many parts of the contiguous U.S. Subzero readings were observed from the upper Midwest to the Great Basin, and nearly a dozen new daily record lows were established in the central Rockies. The mercury at International Falls, MN plunged to  $-36^{\circ}\text{F}$  on Saturday. Strong wind gusts accompanied the Arctic blast, creating dangerous wind chills from the Rockies to the upper Mississippi Valley. Parts of Minnesota observed wind chills down to  $-70^{\circ}\text{F}$  on Thursday. Meanwhile, heavy snow blanketed large portions of the northern tier of states, with over a foot of snow accumulating from the mountains of Washington and Oregon to the northern Rockies. Farther east, strong wind gusts generated heavy lake-effect snow squalls in the snowbelt areas of Michigan, Ohio, Pennsylvania, and New York. Snow fell at the rate of 2–4 inches per hour across western New York, depositing 20 inches at Turin. Nearly a foot of snow was measured in parts of northwestern Pennsylvania and lower Michigan. In Alaska, bitterly cold conditions gripped the interior as temperatures plunged below  $-50^{\circ}\text{F}$  and strong wind gusts generated wind chills near  $-80^{\circ}\text{F}$ . Up to a dozen record lows were established, including a reading of  $-51^{\circ}\text{F}$  at Chandler Lake, AK. In sharp contrast, unusually warm weather engulfed most of Florida while warm and wet conditions enveloped the Hawaiian Islands. Readings topped  $80^{\circ}\text{F}$  as far north as northern Florida, establishing a few record daily highs. In Hawaii, the mercury soared to  $90^{\circ}\text{F}$  at Kahului, Maui on Thursday. In addition, heavy rains soaked some Hawaiian locations, with over 9 inches inundating Lihue.

The week began with wintry conditions across much of the West. Heavy snow fell from the Northwest to the northern Rockies as a low and trailing cold front pushed ashore and tracked eastward. Up to 2 feet of snow blanketed Snowquahmie Pass in Washington while as much as a foot whitened parts of Oregon, Idaho, Montana, and Wyoming. Cold air spread as far south as southern California, where lows dropped into the upper thirties along the coast while some desert locations plummeted into the teens. Meanwhile, strong wind gusts buffeted the northern and central Rockies, generating blowing and drifting snow that closed some roads. Frigid weather prevailed from the Great Basin to the upper Midwest, with subzero readings observed from Nevada to Wisconsin on Sunday, producing a dozen record daily lows, mainly in the central Rockies. In sharp contrast, very warm conditions overspread most of Florida as the mercury topped  $80^{\circ}\text{F}$  as far north as the panhandle, establishing record daily highs at a few locations.

During the last half of the week, heavy snow and strong wind gusts ushered a blast of frigid Arctic air into the north-central U.S. and eventually into the East. Up to half a foot of snow covered parts of Wyoming and Montana while wind gusts over 50 mph battered the Rockies, northern Plains and upper Mississippi Valley, generating blowing and drifting snow and dangerous wind chills.

The core of the cold air pushed rapidly south and east, settling into the East toward the weekend. Meanwhile, a warm front in the northern Plains, associated with a low in south-central Canada, brought a short-lived warming trend to parts of the Dakotas. The temperature at Bismarck, ND rose  $60^{\circ}\text{F}$  (from  $-18^{\circ}\text{F}$  to  $42^{\circ}\text{F}$ ) in a 15-hour period late Wednesday into Thursday; however, a reinforcing shot of Arctic air plunged into the northern Plains toward the weekend, bringing a return to subzero readings. Farther east, heavy lake-effect snow squalls blanketed lower Michigan, northern Ohio, northwestern Pennsylvania, and western New York. In Alaska, bitterly cold conditions persisted across the interior sections as readings plunged to  $-56^{\circ}\text{F}$  at Fort Yukon.

According to the River Forecast Centers, the greatest weekly precipitation totals (more than 2 inches) were limited to the southern Appalachians, the Tennessee Valley, northwestern Oregon and western Washington, the Hawaiian Islands, and scattered locations in the lower Mississippi Valley, the Deep South, and southern Alaska. Light to moderate amounts were measured from the eastern sections of Oklahoma and Texas northeastward to the mid-Atlantic, across northern New England, in the northern Rockies and Intermountain West, along the northern half of the Pacific Coast, and in the remainder of southern and scattered locations in central Alaska. Little or no precipitation fell from southern New England westward to the northern and central Great Plains and in the southern Atlantic, the central and southern Rockies, the Southwest, the Great Basin, the southern two-thirds of California, and the remainder of Alaska.

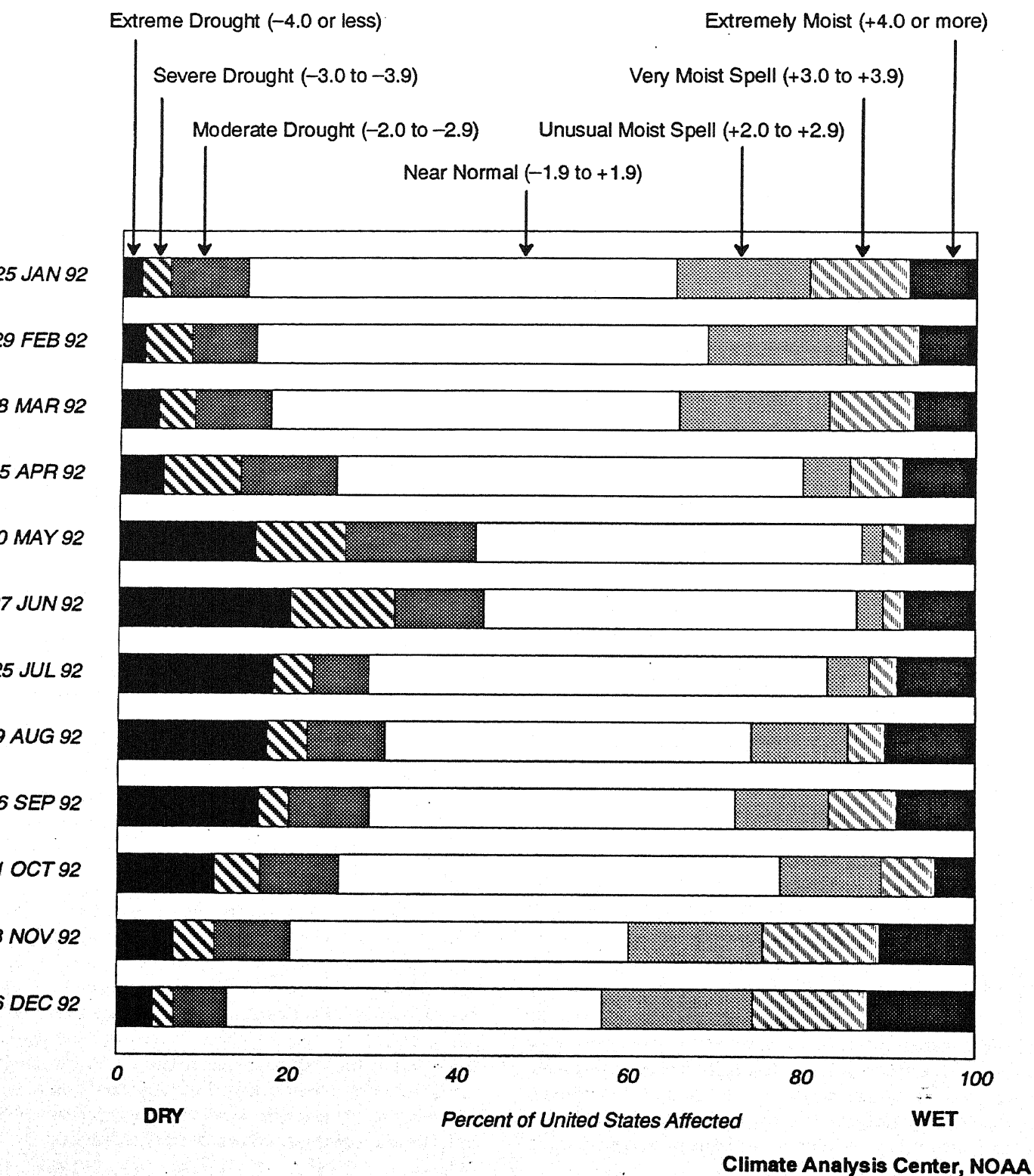
Temperatures averaged well above normal across the eastern quarter of the nation, most of the deep South, the southern and east-central Great Plains, and the northern Rockies and Intermountain West. Weekly departures between  $+7^{\circ}\text{F}$  and  $+11^{\circ}\text{F}$  were common across the Southeast, along most of the Gulf Coast, and at scattered locations in the Intermountain West. Departures of  $+3^{\circ}\text{F}$  to  $+6^{\circ}\text{F}$  were observed from the southern Plains northeastward into New England, across the northern Rockies, and in the remainder of the Intermountain West. In Alaska, unusually mild weather was confined to the extreme southwestern locations, where weekly departures reached  $+15^{\circ}\text{F}$  at King Salmon. Unusually warm conditions also prevailed in the Hawaiian Islands.

In contrast, abnormally cold weather dominated from the West Coast eastward to the central and southern Rockies and from the northern Plains eastward to the Great Lakes and into the Ohio Valley. Weekly departures between  $-10^{\circ}\text{F}$  and  $-18^{\circ}\text{F}$  were recorded in the northern Plains, the central and southern Intermountain West, and the central Rockies. Temperatures averaged  $3^{\circ}\text{F}$  to  $9^{\circ}\text{F}$  below normal across the remainder of the aforementioned areas. In Alaska, bitterly cold conditions gripped most of the state, with temperatures at interior locations plunging below  $-50^{\circ}\text{F}$ , producing weekly departures down to  $-26^{\circ}\text{F}$  at Bettles.

# NORTH AMERICAN CLIMATE HIGHLIGHTS FEATURE

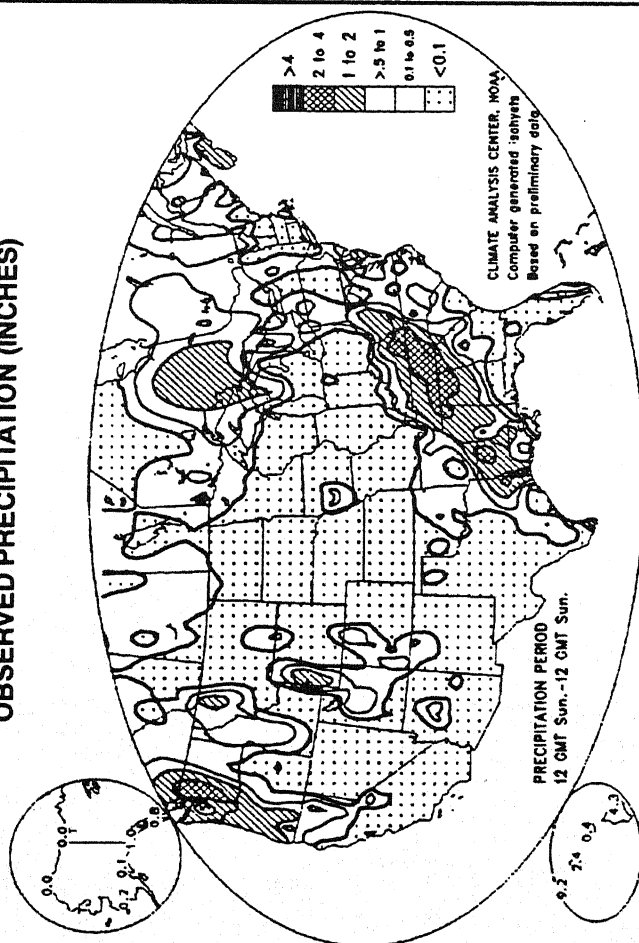
## PERCENT OF UNITED STATES AFFECTED BY A WET SPELL OR DROUGHT, BASED ON THE PALMER INDEX

January through December 1992

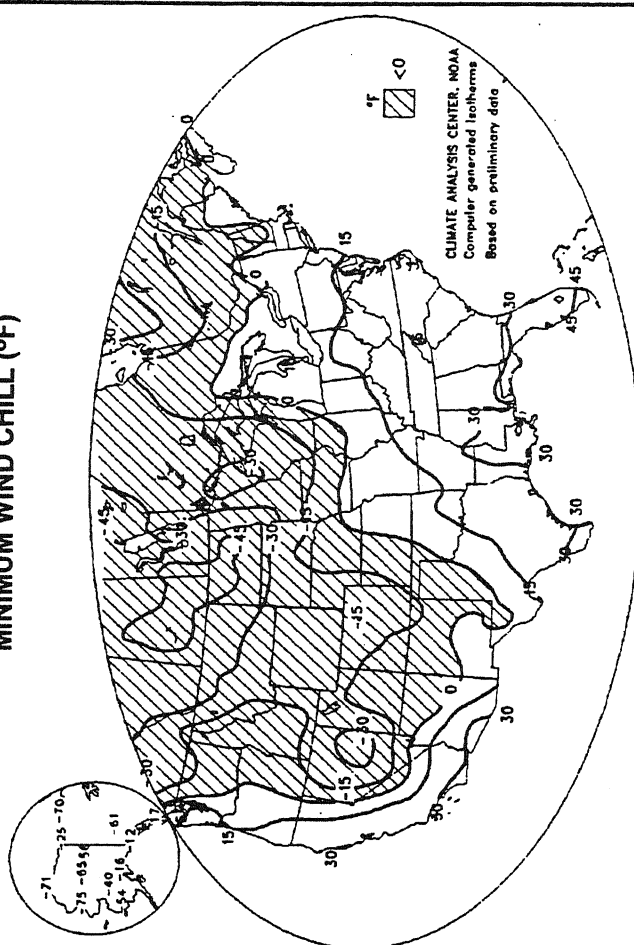


# UNITED STATES WEEKLY CLIMATE CONDITIONS (December 20 – 26, 1992)

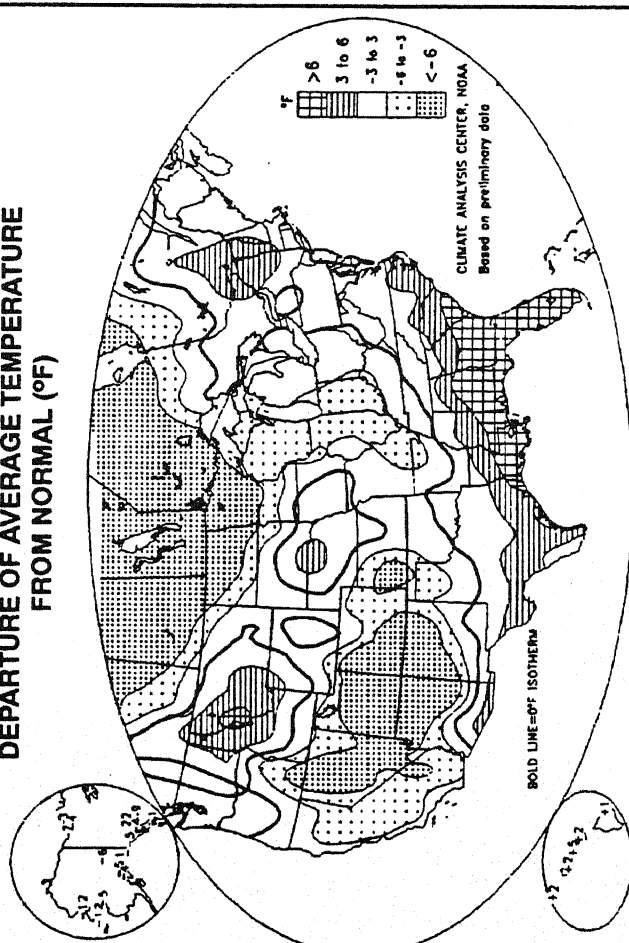
OBSERVED PRECIPITATION (INCHES)



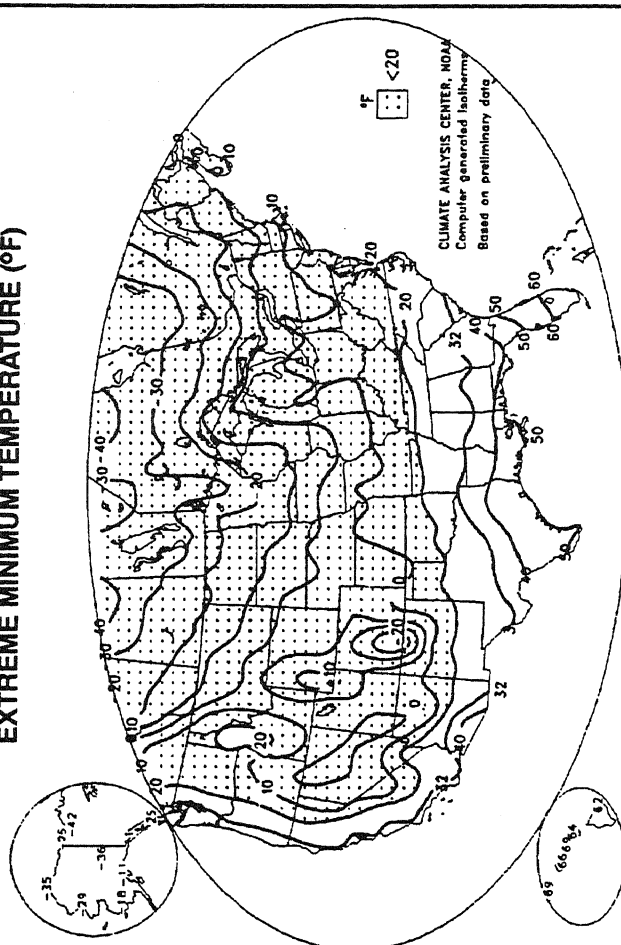
MINIMUM WIND CHILL (°F)



DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)

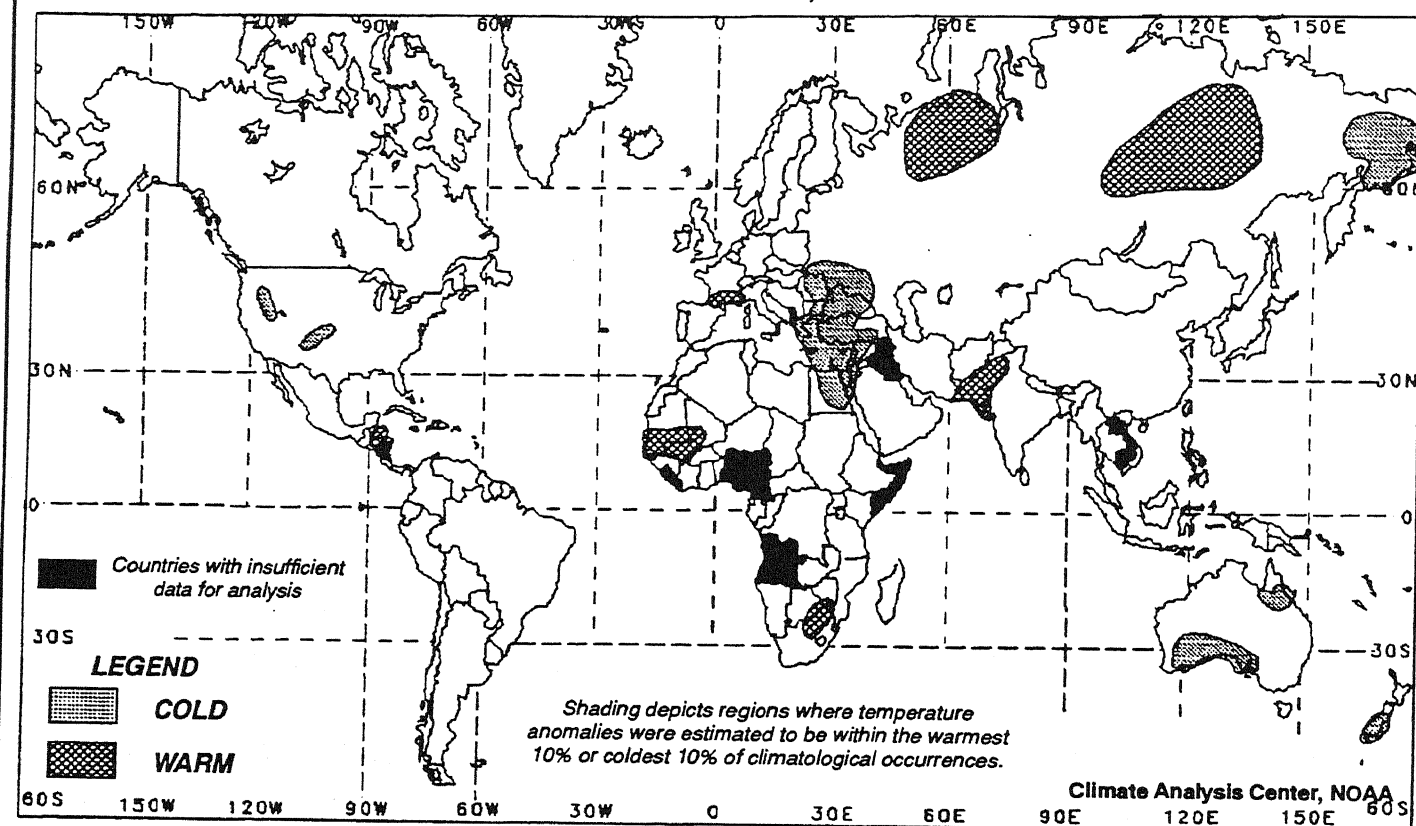


EXTREME MINIMUM TEMPERATURE (°F)



## TWO-WEEK GLOBAL TEMPERATURE ANOMALIES

December 13 – 26, 1992



## FOUR-WEEK GLOBAL PRECIPITATION ANOMALIES

November 29 – December 26, 1992

